

REMARKS/ARGUMENTS

Claims 1-20 remain in the application. Claim 3 has been amended so as to claim subject matter different from claim 4. The specification has been amended to update the priority data. No new matter has been added.

Claim Rejections - 35 USC 112

Claim 4 was rejected as being a duplicate of claim 3. Claim 3 has been amended so as to moot this ground of rejection. Applicants respectfully request withdrawal of the rejection.

Claim Rejections - 35 USC 103

Claims 1, 9, 11, 13-14, and 18-20

Claims 1, 9, 11, 13-14, and 18-20 were rejected as allegedly being obvious in view of Jordan. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. (See M.P.E.P. Section 2143).

Furthermore, M.P.E.P. Section 2141 states that “[w]hen applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

- (A) The claimed invention must be considered as a whole;
- (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;
- (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and
- (D) Reasonable expectation of success is the standard with which obviousness is determined. *Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986)."

In the present case, Jordan fails to teach or suggest all of the claim limitations and there is no suggestion or motivation, in either Jordan or in the knowledge generally available to one of ordinary skill in the art, to modify Jordan to include the missing limitations.

As a whole, claims 1, 9, 11, 13-14, and 18-20 are drawn to *ungrounded* containers and include limitations to “[a]n ungrounded type flexible fabric container.” Jordan, while explicitly silent on this subject, is clearly drawn to *grounded* containers. The prior art of Canadian Pat. No. 1,143,673, WO 93/01110, and U.S. Pat. No. 5,092,683 that Jordan describes as “containers and fabrics [that] provide protection against static charging” (see col. 1:33 to col. 2:5) all disclose grounded containers.

Indeed, as a whole, Jordan teaches continuous conductivity and overlapping connection of the conductive tapes (as desirable in grounded containers) and *teaches against* the use of filaments:

“This laminar configuration of continuous layers provides both strength-imparting and *conductive layers along substantially the entire length and width of the tapes*. It will be appreciated by those skilled in the art that the configuration of the tapes distinguishes them, both structurally and functionally, from filaments. The tapes’ essentially flat nature and essentially rectangular cross sections make them well suited for weaving into flat fabrics of the type used for manufacture of bags and containers. When woven in a close weave, such fabrics provide good coverage and weaving efficiency in terms of number of yarns needed to cover a given area. The flat nature of the tapes also ensures *substantial contact between warp and weft tapes at their crossover points* in the weave, thereby promoting conductivity of the fabrics. Filaments, in contrast, are not as well suited for production of flat fabrics when woven with tapes, nor do they provide the same extent or efficiency of coverage.” Col. 5:39-55, emphasis added.

In contrast to this, the present invention, as a whole, is drawn to an ungrounded solution to the static problem and uses conductive staple fibers to enhance corona discharge instead of using grounding to dissipate the charge. As stated in paragraph [23] of the present application:

“Surprisingly, it has been determined that the *electrical discontinuity enhances the ability of the yarn to control electrostatic charge densities in an ungrounded fabric*. It is thought that the shorter conductor segments

limit the capacitance of the yarn thereby reducing charge density. In addition, the numerous sites of electrical discontinuity provide *greater numbers of corona discharge sites* than methods heretofore disclosed. As a result, superior anti-static performance is accomplished with fabric comprising such yarns. Similarly, fabrics with equivalent anti-static performance are produced from lesser amounts of conducting yarn or with yarn at a wider spacing.” Emphasis added.

This advantage of the present invention is claimed via the use of staple fibers, which is clearly not taught or fairly suggested by Jordan. As disclosed in the specification at paragraph [22]:

“Manufacture of staple yarn is known in the art and consists of spinning *multiple short lengths of fibers together*. For example, a staple yarn may contain fibers of a consistent 1.5 inch length that are spun together into a single multi-fiber yarn. In such yarns, *each staple length is separate from each other length* with only casual mechanical contact between lengths. As a result, when the staple lengths are further comprised of conductor or semi-conductor fibers, *electrical discontinuity exists between staple lengths.*” Emphasis added.

With respect to the present invention’s use of staple fibers, Jordan fails to disclose at least the limitation of claims 1 and 9 “wherein the antistatic yarn segments comprise yarn segments of conductive and non-conductive staple fibers and wherein the conductive staple fibers are fibers having a conductive constituent on an outer surface of a non-conductive constituent” and fails to disclose at least the limitation of claims 11 and 18 “wherein the antistatic yarn segments comprise yarn segments of conductive and non-conductive staple fibers and wherein the conductive staple fibers comprise a bicomponent conductive staple fiber having 1 or more longitudinal stripes of a carbon loaded conductive constituent on an outer surface of a non-conductive constituent.”

Furthermore, Jordan fails to disclose: antistatic yarn spacing of 3mm to 100mm (Jordan instead discloses 20mm to 400mm spacing of tapes) as required by all the claims; non-conductive tape having a melt flow index of 1-6g/10min. (Jordan only discloses 1.5-20g/10min. for the drawing of *conductive* tapes) as required by claims 9 and 18-20; non-conductive tape deniers of 500 to 4000 (Jordan only discloses deniers of 200 to 1500) as

required by claims 9 and 18-20, and tape width of .07 to .4 inches (~2-10mm, Jordan only discloses tape widths of 1-5mm) as required by claims 9 and 18-20.

For the reasons discussed above, Applicants respectfully submit that Jordan fails to render a *prima facie* case of obviousness against claims 1, 9, 11, 13-14, and 18-20 and requests withdrawal of the rejection and allowance of the claims.

Claims 2-5, 7-8, and 12

Claims 2-5, 7-8, and 12 were rejected as allegedly being obvious over Jordan in view of Mohammed. However, as discussed above with respect to the independent claims, the primary reference Jordan fails to disclose an ungrounded container or any use of staple fibers. Mohammed fails to cure any of these deficiencies such that the present rejection fails for the same reasons cited above with respect to the independent claims. As such, Applicants respectfully submit that the combination of Jordan and Mohammed fails to render a *prima facie* case of obviousness against claims 2-5, 7-8, and 12 and requests withdrawal of the rejection and allowance of the claims.

Claims 6, 10, and 15-17

Claims 6, 10, and 15-17 were rejected as allegedly being obvious over Jordan in view of Mohammed and Ebadat. As discussed above with respect to the independent claims, the primary reference Jordan again fails to disclose an ungrounded container or any use of staple fibers. Mohammed fails to cure any of these deficiencies, but Ebadat does disclose the use of anti-static fibers to produce an ungrounded container.

However, as stated in M.P.E.P. 2143.01, if a “proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).” An intended purpose of Jordan is to replace conductive filaments with conductive tape to allow easier weaving, flatter fabrics, stronger conductors, etc. As such, any modification of Jordan to use anti-static fibers of Ebadat would clearly be improper.

Furthermore, even if Jordan and Ebadat were properly combinable (Applicants maintain they are not, as discussed above), none of the cited prior art discloses or fairly

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suggest the use of conductive staple fibers such that the present rejection fails for the same reasons cited above with respect to the independent claims.

In view of the above arguments, Applicants respectfully submit that claims 1-20 are novel and non-obvious over the cited prior art.

Conclusion

For the reasons cited above, Applicants submit that claims 1-20 are in condition for allowance and requests reconsideration of the application. If there remain any issues that may be disposed of via a telephonic interview, the Examiner is kindly invited to contact the undersigned at the local exchange given below.

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